

OSA -0161-66

30 December 1965

Subject: ECP GR-44, CONTRACT LP-2264 AND  
CW-6644

Dear Chuck,

This ECP has been technically approved by the  
SPO. Request you provide [ ] with formal approval to  
proceed.

STATINTL

[ ] has advised us that retrofit phasing  
will not be critical since modified Antenna Control Units are  
fully interchangeable with un modified [ ] Control Panels and  
vice versa. Further unmodified Antenna Control Units can be  
fully tested by modified Antenna Control Testers using a revised  
procedure which [ ] will supply with their FSB, if not  
before.

STATINTL

The cost of this change for the eight prototype  
units is approximately \$370.

STATINTL

Regards,

Atch.

cc:

[ ]  
Colonel, USAF  
Deputy Director, F-12 SPO  
Deputy for Systems Management

<b>GA - 531</b>		ENGINEERING STUDY <input type="checkbox"/>	<b>GR - 44</b>							
DATE <b>12-14-65</b>		AFFECTS: <b>GA 531A SLR</b>								
NAME OF MAJOR COMPONENT 1. Antenna Control Assy 2. SLR Control Panel 3. Ant/Aat Control LEU		PART OR LOWEST SUB-ASSEMBLY 1. Gyro Control Ampli PC Board 2. Diode Board No. 1		PART NO., MODEL OR TYPE <b>See page 2.</b>						
TITLE OF PROPOSAL: <b>Antenna Control Unit and SLR Control Panel Modification</b>										
NATURE OF PROPOSAL: The following changes are initiated by the contractor: 1. Antenna Control Assembly, P/N 531A 00-001-101 changes. A. Change P/N 531A206-005-101, Gyro Control Ampli PC Board to P/N 531A206-005-105 after the following changes have been made: 1. Change resistor R1 from RC20GF101K to RC20GF334J. 2. Change resistor R3 from RC20GF514K to RC20GF224J. (CONT on pages 2 & 3) (REF: REW KP-I-220)										
REASON FOR PROPOSAL: Item 1.A.3, 1.B.1 and 1.E.2 — To increase antenna beam steer rate. Item 1.A.4 — To increase ECO sensitivity. Items 1.A.7, 1.A.1, 1.A.2, 1.A.5 and 1.A.6 — Provide a 10-second delay in entering turn mode. Items 1.B.3 thru 1.B.6 — To increase receiver BIT gain. Items 2.A.1 and 3.A — To increase antenna beam steer (earth rate). Item 1.C.1 and 1.C.2 — To reduce noise on monitor outputs to the multiplex systems.										
<b>ES</b>	ESTIMATED COST AND TIME INVOLVED: ADDITIONAL FUNDING REQUIRED: <b>\$6,325 (includes \$3,295.48 Eng.)</b>									
<b>CP</b>	ESTIMATED COST FOR KITS OR PARTS: ADDITIONAL FUNDING REQUIRED:									
ITEMS AFFECTED BY PROPOSAL: <b>See page 3.</b>										
SAFETY	MISSION EFFECTIVENESS	PERFORMANCE	OPERATING PROCEDURE	INTER-CHANGEABILITY	WEIGHT OR WEIGHT AND BALANCE	TOOLS AND SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ESTIMATED MAN HOURS REQUIRED TO ACCOMPLISH CHANGE IN FIELD: <b>See page 3.</b>										
SOURCE OF PARTS FOR KIT: <b>GR</b>										
AVAILABILITY <u>6</u> WEEKS AFTER APPROVAL										
POSITION OF SPARES AFFECTED: Spares to be reworked. PPB to be changed by change notice to POC										

Nature of Proposal (CONT):

3. Change resistor R4 from RN 70C2491F to RC42GF681J.
4. Change resistor R5 from RW67CF201J to RC42GF152J.
5. Change capacitor C2 from CL65L330MPS to CL65CK680MP3.
6. Add 1N647 Diode.
7. Revise transistor Q3 base circuitry.

B. Antenna Control Unit Wiring Harness

1. Add wire from 2K11-C2 to 2K2-X2.
2. Add wire from 2K11-C3 to 2K8-A1.
3. Add wire from 2K14-A1 to 2K15-B2.
4. Add wire from 2K15-B2 to 2K7-C2.
5. Add wire from 2K15-B1 to 2K7-C1.
6. Add wire from 2K7-C1 to 2K18-X1.

C. Additional Change to Antenna Control Unit Wiring Harness

1. Disconnect wire 2W514 from 2T2-2 and connect it to 2T2-7.
2. Disconnect wire 2W512 from 2J7-T and connect it to 2T2-2.

D. A Mod number will be assigned to the P/N 531A200-100-101, Antenna Control Panel Assembly

2. SLR Control Panel, P/N 531A610-001-101 Changes.

A. Change P/N 531A610-009-101, Diode Board No. 1 to P/N 531A610-009-103 after the following changes have been made:

1. Change resistor R1 from RB54CE19701B to RC20GF563J.

B. A Mod number will be assigned to the P/N 531A610-009-101, Control Panel.

3. Antenna/Antenna Control Tester (LST), P/N 531A910-001-101 Changes

A. Change resistor R43 in Nav Simulator panel from RB54CE19701B to RC20GF563J.

Items Affected by Proposal (CONT):

1. Production Effectivity

A. Antenna Control Assembly

1. Production units S/N A200-9 thru S/N A200-19 will be retrofitted.
2. Production units S/N A200-20 and subs in line.

B. SLR Control Panel

1. Production units S/N A602-9 thru S/N A602-19 will be retrofitted.
2. Production units S/N A602-20 and subs in line.

C. Antenna/Antenna Control Tester (LRU)

1. Production units S/N -3 thru -6.

Estimated Man Hours to Accomplish Change in Field (CONT):

A. Antenna Control Unit

- |                     |      |
|---------------------|------|
| 1. Disassemble unit | 1 hr |
| 2. Modification     | 7 hr |
| 3. Reassemble unit  | 1 hr |
| 4. Test             | 1 hr |

B. Control Panel Unit

- |                 |        |
|-----------------|--------|
| 1. Disassemble  | 30 min |
| 2. Modification | 30 min |
| 3. Reassemble   | 30 min |
| 4. Test         | 1 hr   |

C. Antenna/Antenna Control LRU Tester

- |                 |        |
|-----------------|--------|
| 1. Disassemble  | 20 min |
| 2. Modification | 20 min |
| 3. Reassemble   | 20 min |
| 4. Test         | 1 hr   |